

Chapter 2: Physics in Action

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Chapter Challenge p.128

sports TV / video 2-3 min
physics of the sport (3-5 physics facts) 2pts
entertaining (4pts) per Extra
recording, audio track on video, live
Written script (15pts)



Chapter 2 Teams

Team 1

Viridiana

Rosalia

Itzel

Team 2

Joselyn

Corina

Paola

1

2

3

4

5

6

Joselyn

Itzel

Rosalia

Paola

Viridiana

Corina

2.1: Newton's First Law: A Running Start p.132

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WDYS Little kid (still) kicks ball small distance
Running kid kicks ball very long distance
shoes have cleats on bottom
Mouse stands & kicks ball - no movement
Sound when ball kicked further
- because of more force
appropriate clothing for soccer
lady bug - didn't run so not much force
- is a big force because ball moves
little boy lacks energy

WDYT

Ice Skater

special shoes keep them sliding without much effort

all effort at beginning to start glide

small efforts keep you sliding (small pushes)

ice is slippery - clean + smooth

Zamboni

Soccer ball

shape (round) helps roll

all force at beginning in kick

harder the force the more it will roll

special shoes allow harder kicks

no big bumps in field

bigger people (more muscle) = more force

Inertia: is the natural tendency of ^{2/15} an object to remain at rest or to remain moving with constant speed in a straight line.

Galileo

Said that objects don't stop on their own but because of frictional force that nobody could see.

To stop an object: we need to ^{2/16} apply an unbalanced force

more mass = more inertia

4 kg - kilogram, 1000 grams

1 kg = 2.2 lb

distance = m

mass = kg

time = s

$$N_{\text{javelin}} = N_{\text{hand}} + N_{\text{shoulder}} + N_{\text{wrist}} + N_{\text{elbow}}$$

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CU 1,2,5,6 PtG#1-4, 10

2.2 Constant Speed and Acceleration: Measuring Motion

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p. 145

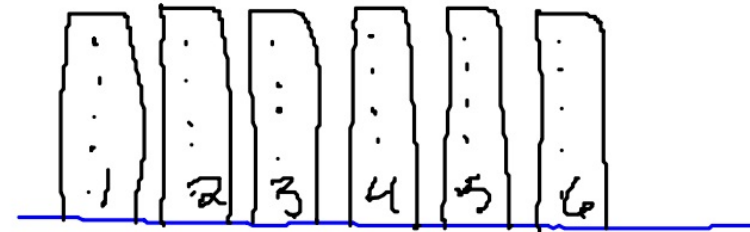
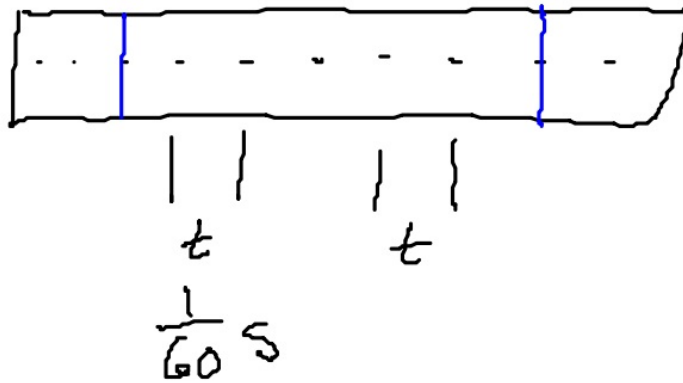
WDYS

Boy walking w/dog - steps close together
sleeping, slower than ^{+dog} snail, dropping stuff

Boy running w/flowers, excited, in love?,
steps farther apart, sweating, closer to
dog's speed
more excitement = more energy = faster

WDYT

You travel 100 mi for every hour of travel
fast speed
car, baseball, train, speed boat, birds



average speed

How fast you are going most of the time.

instantaneous speed

The speed that you have at one moment.